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NATION FACES NEW SECURITY PERIL

U. S. Scientific Training Program Continues To Lag Badly Despite Recent Repeated Warnings

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WASHINGTON — One of the most pressing problems before the National Security council today is what to do about America's lagging scientific training programs.

Top American scientists, military men and civilian defense leaders repeatedly warned in recent months about the possible tragic consequences that might result if the present acute situation is allowed to deteriorate still further.

The NSC's activities are top secret. However, according to one highly authoritative source, the NSC has begun to pull "all stops" in an effort to cope with the crucial situation. President Eisenhower himself is known to be particularly concerned about the ominous "shadow on the wall."

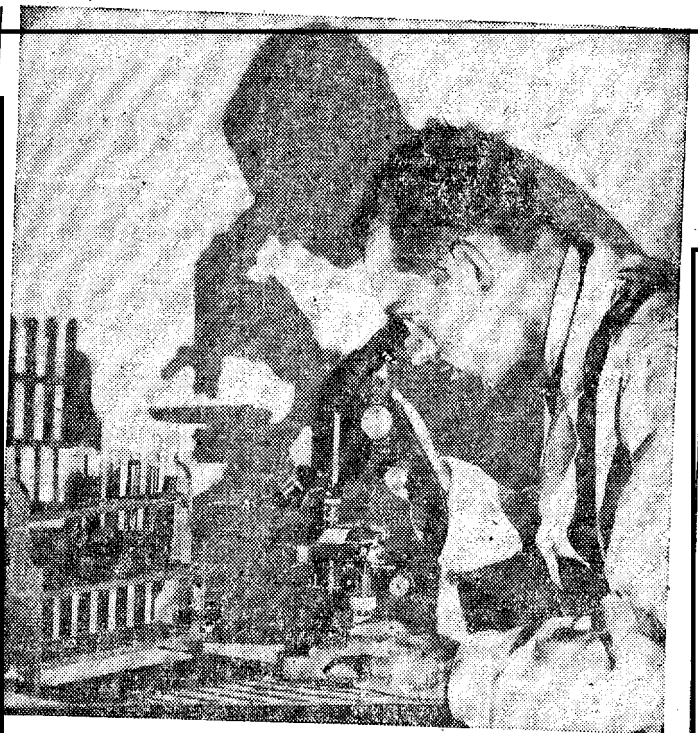
In focusing nationwide attention on the shortage of highly-trained technical and scientific personnel needed for defense work, the government hopes to persuade more youths to enter scientific fields.

If America's young men fail to respond in the numbers needed to the urgent demand for more manpower in the physical sciences, you can expect the government to launch a widespread drive to recruit women into the technical professions.

This, we're told, is highly likely to happen in the light of past experience.

At the same time it was pointed out that "Rosie-the-Riveter" of World War II fame is also needed in defense industries, although her on-the-job training in technical fields other than mere riveting would likely be more complex today than during the war years.

This is why it has become increasingly necessary for defense leaders to alert today's youth to the importance of a thorough grounding in time-consuming scientific and technical training programs.



A young American scientist at work. This one is engaged in highly important medical research.

According to the Navy's nuclear division chief, Rear Adm. H. G. Rickover, Russia will outpace the United States in the total number of scientists and engineers in less than five years.

By 1960, he stressed, the Soviets may be inventing better machines than we can turn out simply because they will have more scientific men and women than us.

Rickover considers the present crisis in education as grave a problem as any that faces the United States today. "Unless it is dealt with promptly and effectively," he warns, "the machinery which sustains our level of material prosperity and political power will begin to slow down and we will be in danger of losing the cold war in default."

Allen Dulles, director of the Central Intelligence agency, has also emphasized this. Between 1950 and 1960, he said recently, Russia will have graduated 1,200,000 scientists and engineers, compared with 900,000 in the United States under its present program. The United States now has about 800,000 engineers and scientists compared to Russia's 650,000. However, the Soviet Union is today graduating almost twice as many technical specialists in certain fields as the United States.

Chairman of the Atomic Energy commission, Lewis L. Strauss, put it this way, "In 10 years we could be hopelessly outstripped." The already dangerous situation, he warns, "could become disastrous" with the next decade.

Strauss believes more scientists should volunteer to conduct classes in scientific study in secondary schools to whip the situation. He also thinks American institutions of higher learning should make sufficient credits in physics and chemistry a requirement for enrollment.

Rickover feels industry and labor groups should financially support every young person who is qualified to obtain a college education.

Rickover would also like to see the salaries of teachers "increased drastically" and the school year lengthened from 180 to about 210 class days. He points out that in Europe, as well as in Russia,

students go to classes six days a week.

Rickover, moreover, is for a "dual" school system at the secondary level which permits bright students to forge ahead in high schools with higher standards.

It is interesting to note that in Soviet Russia students begin to specialize while in secondary school, where 40 per cent of all instruction is devoted to science.

There is only a small number of Russian graduates in the humanities, whereas between 65 and 70 per cent of all graduates in this country are in the social sciences and the liberal arts.

While the problem has many ramifications, authorities are not so much concerned about lowering the numbers of those in the social sciences as they are about getting more qualified students into the physical sciences.

One major problem, then, is to open the doors of learning to more students interested in science, while another is to help pay the way of scientifically-minded students who normally